

AMENDMENTS TO THE CLAIMS

1 (Currently amended): A liquid injector for injecting a liquid into a patient from a ~~syringe~~ two syringes each having a cylinder member and a piston member inserted slidably into the cylinder member, comprising:

a patient tube having a leading end connected to the patient;

~~a plurality of~~ two syringe tubes, each of their trailing ends being connected to each of a ~~plurality of~~ the syringes;

a tube connecting member means for connecting a trailing end of the patient tube to leading ends of ~~a plurality of~~ the syringe tubes;

a syringe hold member for removably holding ~~a plurality of~~ the syringes;

~~a plurality of~~ two syringe drive mechanisms, each of the mechanisms causing each of a ~~plurality of~~ the syringes to perform injection of the liquid by relatively moving the cylinder member and/or the piston member;

a first tube block mechanism having a first press member disposed movably at a position for pressing a first one of the syringe tubes to allow opening or closing thereof and a first hold member disposed opposite to the first press member through the first syringe tube,

a second tube block mechanism having a second press member disposed movably at a position for pressing a second one of the syringe tubes to allow opening or closing thereof and a second hold member disposed opposite to the second press member through the second syringe tube

~~a plurality of tube block mechanisms, each of the mechanisms blocking each of a plurality of the syringe tubes to allow opening or closing thereof; and~~

an interlock control means for interlocking operation of a plurality of the tube block mechanisms and a plurality of the syringe drive mechanisms to open only one of the syringe tubes and drive only one of the syringes associated with the opened syringe tube; and

an open or close interlock mechanism for interlocking opening or closing operation of the two tube block mechanisms, the open or close interlock mechanism having a cam member supported rotatably and having a concave portion of a surface thereof with which the first press member and the second press member engage, and

wherein the first and second press members release the blocking of the first and second syringe tubes by their trailing ends being fit in the concave portion so that one of the syringe tubes is released after the other syringe tube is blocked..

2-6. (Canceled)

7 (Currently amended): The liquid injector according to claim 1, further comprising a first block sensor for sensing a first one of the syringe tubes being blocked and a second block sensor for sensing a second one of the syringe tubes being blocked,

wherein the interlock control means activates a second one of the syringe drive mechanisms after the first block sensor senses the blocking and activates a first one of the syringe drive mechanisms after the second block sensor senses the blocking.

8 (currently amended): The liquid injector according to claim 1, further comprising a one-way valve for regulating the movement of the liquid in a direction from the syringe to the patient, the at least one one-way valve being provided for at least one of the patient tube and a plurality of the syringe tubes.

9. (New) The liquid injector according to claim 1, wherein the cam member has another concave portion in which both of the first and second press members are simultaneously located so that the first and second syringe tubes are released from blocking simultaneously.

10. (New) The liquid injector according to claim 9, further comprising a release sensor for sensing both of the first and second press members are fit in the another concave portion.

11. (New) The liquid injector according to claim 7, wherein the cam member has a convex which is sensed by the first and second block sensors.

12. (New) The liquid injector according to claim 7, wherein the first press member has a convex which is sensed by the first block sensor and the second member has a convex which is sensed by the second block sensor.